



Studies of Esophageal Balloon Cytology in Linxian, China

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Abstract: Esophageal cancer is the second leading cause of cancer death in China. Esophageal cancer has a very poor prognosis, principally because most tumors are asymptomatic until they are unresectable. Esophageal balloon cytology is an early detection method developed by Chinese scientists to identify resectable early cancers and precursor lesions. Previous studies have reported high sensitivities for detecting esophageal cancer in symptomatic patients. The current report describes several studies evaluating this diagnostic technique in asymptomatic individuals. A comparison of Chinese and U.S. cytological diagnoses of the same esophageal samples showed that the Chinese categories of precancerous neoplasia were more inclusive than the corresponding U.S. categories. Comparisons of both Chinese and U.S. cytological diagnoses with concurrent histological findings showed low (14-36%) sensitivities for the cytological detection of biopsy-proven cancers. Prospective follow-up studies of several screened cohorts showed a consistent progression of risk for developing esophageal cancer with increasing severity of initial cytological diagnosis. These preliminary studies suggest that esophageal balloon cytology is a useful technique that can benefit from additional research to improve its optimal performance.